



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/533,382

04/29/2005

Jan Babic

P70549US0

7062

136 7590 08/01/2007

JACOBSON HOLMAN PLLC
400 SEVENTH STREET N.W.
SUITE 600
WASHINGTON, DC 20004

EXAMINER

LAWSON, MATTHEW P

ART UNIT

PAPER NUMBER

2871

MAIL DATE

DELIVERY MODE

08/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,382	Applicant(s) BABIC, JAN	
	Examiner Matthew P. Lawson	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed 10 May 2007 has been received and entered.

Claims 1 and 2 have been cancelled. **Claims 3-13** are currently pending in this application.

Specification

2. The corrected abstract filed 10 May 2007 has been received and entered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. **Claims 3-13** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

5. Specifically, the claims and the specification fail to specify how "each length of a line of view" is determined. The line of view (10) is defined in the specification as a line

Art Unit: 2871

from the eye of the spectator to a point on the display, as shown in Figs. 1 and 2.

However, the specification does not recite means for the device or the microcontroller to determine the length of the line of view from the spectator to the device. One ordinarily skilled in the art at the time of the invention would understand that, outside of any requirements to the contrary, the number of possible positions of the spectator with respect to the display device is unlimited. Therefore it is not possible to determine each length of a line of view, and thereby not possible to define the how the vertical and horizontal coordinates are moved as a function thereof.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 3-13** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Specifically, there is insufficient detail in the specification to determine said "each length of a line of view," as recited in claims 3 and 10, since the position of a viewer viewing the device is inherently highly variable. Therefore, the claims are held to be indefinite because they fail to properly define the claimed functions.

9. Claim 3 also recites the limitation "the illumination means" in line 10 of the claim. There is insufficient antecedent basis for this limitation in the claim

Art Unit: 2871

10. Claim 10 also recites the limitation "the controller means" in line 12 of the claim.

There is insufficient antecedent basis for this limitation in the claim.

11. The remaining claims are also rejected since they depend from, and thereby include all the limitations of, claims 3 and 10.

Response to Arguments

12. Applicant's arguments with respect to the claims have been considered but are not persuasive.

13. In response to applicant's argument on page 12, the argument used to show the disadvantages of the device of Jurjavčič is based on the hypothetical situation of a straight panel being put in device of Jurjavčič. However, the display surface of Jurjavčič is curved, and the curvature is expressly to correct for the distortion that occurs when a straight panel is used. Since the display of Jurjavčič is not a straight panel, then any argument based on Jurjavčič using such a panel is moot. Furthermore, the applicant is relying on features (i.e. a straight panel), which are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

14. In response to applicant's argument on pages 12-14 that the picture presented by the device of Jurjavčič device will always be distorted, the examiner disagrees.

Art Unit: 2871

Jurjavčič expressly states for the two-or three-dimensional display object to be curved or deformed to give the desired object picture (Jurjavčič, col. 1, line 66 – col. 2, line 10). Specifically, it appears that the mechanical curving of the panel does transform both the horizontal and vertical coordinate of the image, as seen in the transformed time and date display visible in Figs. 1 and 3 of Jurjavčič, which would correct for the two types of distortion. Furthermore, it appears from the disclosure of Jurjavčič that one ordinarily skilled in the art can curve the display in either two or three dimensions in order to give the desired object, i.e. an object without distortion.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. **Claims 10-13** are rejected under 35 U.S.C. 102(b) as being anticipated by Jurjavčič, US Pat. No. 6,460,278 B1.

17. Regarding claim 10, Jurjavčič discloses a device allowing simultaneous visibility of images in the area of 360° therearound, comprising a shield having an axle, wherein the shield is rotatable around the axle and has:

(a) a diametral surface,

Art Unit: 2871

- (b) a coating with a slot running approximately parallel to the axle,
- (c) at least one display, wherein the at least one display is a printed transformed image, wherein the image is transformed by transforming both the vertical and horizontal coordinates of each point on the display.

18. Specifically, the image is transformed when printed on the curved surface (3) (Jurjavčič, Figs 1, 3, e.g.).

19. Regarding claims 12 and 13, Jurjavčič further discloses the shield to be cylindrical and drive means for driving the axle (Jurjavčič, Fig 4; col. 3, lines 23-38).

20. **Claims 10-13** are further rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt, US Pat. No. 3,160,971.

21. Regarding claim 10, Schmidt discloses a device allowing simultaneous visibility of images in the area of 360° therearound, comprising a shield having an axle, wherein the shield is rotatable around the axle and has:

- (a) a diametral surface,
- (b) a coating with a slot running approximately parallel to the axle,
- (c) at least one display, wherein the at least one display is a printed transformed image, wherein the image is transformed by transforming both the vertical and horizontal coordinates of each point on the display (Schmidt, Figs. 1, 3, 8; col. 5, lines 4-28).

22. Regarding claims 12 and 13, Schmidt further discloses the shield to be cylindrical and drive means for driving the axle (Schmidt, Fig. 1 + assoc. text).

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. **Claims 3-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jurjavčič.
25. Regarding claims 3-5 and 9, Jurjavčič discloses a device allowing simultaneous 360° visibility of images, said device being:
- b. made of a cylindrical shield (1), which rotates around its axle (4) with a drive (5, 12), whereby
 - c. the shield has a coating with a slot (2) running approximately parallel to the axle, and
 - d. the shield (1) has at least one display (3) on near the diametric surface (Jurjavčič, Figs. 1 and 2), whereby

Art Unit: 2871

e. the display is a display with electronically controlled light points ($S_1..S_n$) (Jurjavčič, Fig 4; col. 3, lines 23-38).

26. Jurjavčič also states that an image on the display must be curved in order to give a straight picture from the device. Specifically, the curved correction as disclosed by Jurjavčič (See Figs. 1 and 3) is inherently adjusted by moving the location of the vertical and horizontal coordinates of an original image as a function of each length of a line of view from the image to the spectator viewing the image.

27. Jurjavčič fails to expressly disclose a microprocessor adjusting the position the location of each image point (i.e. controlling the light points).

28. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to control the light points of Jurjavčič via a microprocessor, since the use of a microprocessor to control light points (e.g. a liquid crystal cell or an LED array) would have been well known in the art (of displays) at the time of the invention.

29. Regarding claims 6 and 7, claim 3 is unpatentable over Jurjavčič as discussed above. Jurjavčič further discloses LED and LCD displays (col. 1, ¶ 1).

30. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use either a liquid crystal display or an LED array for the point sources of light (i.e. electronic display) of Jurjavčič, for advantages of high brightness and the ability to display moving images.

31. Regarding claim 8, claim 3 is unpatentable over Jurjavčič as discussed above.

32. Jurjavčič fails to expressly disclose an optical line.

33. However, it would have also been obvious to one ordinarily skilled in the art at the time the invention was made to use a optical line in the device including a microprocessor, as taught by Jurjavčič above, in order to reliably rotationally couple the signal wire to the microprocessor.

34. Regarding claim 11, claim 10 has been anticipated by Jurjavčič as discussed above. Jurjavčič the display (3) to be a concave display showing a static image (Jurjavčič, Fig. 1).

35. Jurjavčič fails to expressly disclose the static image to be created from a corrected digital variant of the original image.

36. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the static image of Jurjavčič to be created from a corrected digital variant of the original since obtaining, correcting, and printing digital images would have been well known to one ordinarily skilled in the art at the time of the invention.

Conclusion

37. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2871

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew P. Lawson whose telephone number is 571-272-9795. The examiner can normally be reached on Monday through Thursday from 8:00am to 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms, can be reached at 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2871

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew P. Lawson,
Examiner

MPL


ANDREW SCHECHTER
PRIMARY EXAMINER